



X-Plain™

Surgery for Diverticulosis

Reference Summary

Diverticulosis is a common condition that could potentially cause life-threatening complications.

Doctors may recommend the surgical removal of part of the colon for diverticulosis.

The decision whether or not to have this surgery is also yours.

This reference summary will help you understand better the benefits and risks of colon surgery for diverticulosis.

Anatomy

The colon is the last part of the intestines, also known as the large intestine.

Swallowed food goes through the esophagus, the feeding tube. It then passes through the stomach where it is partially digested.

Food goes from the stomach to the small intestines where nutrients are further digested and partially absorbed.

Fibers and digested food finally reach the colon.

In the colon, the rest of the nutrients get absorbed and stools are formed. Stools are then stored in the last part of the colon, the 'sigmoid' and 'rectum,' before being excreted.

The colon has multiple components:

- Ascending colon,
- Transverse colon,
- Descending colon,
- Sigmoid colon,
- Rectum and the anus.

Symptoms and Their Causes

Constipation causes stools to become hard. This requires the colon to exert more effort to push the stools along.

This increased pressure over time causes the wall of the colon to stick out like pouches. These pouches are known as diverticulae.

Most diverticulae are located in the sigmoid section of the colon.

The combination of the pouching, known as diverticulosis, and infection, results in pain in the abdomen and possible fever. This is called diverticulitis.

If one of these diverticulae ruptures, the infection could spread to the whole abdomen. This is known as peritonitis. This condition could potentially lead to death.

Tests like sigmoidoscopy and colonoscopy will help your doc-

tor determine the extent of the disease. During these tests, your doctor uses a special scope placed through the rectum to look inside the colon.

Sometimes a barium enema test may also be needed. This is an x-ray test taken after the colon is filled with liquid barium.

Alternative Treatments

Improving your diet by increasing the amount of fiber and liquid that you consume may help.

Liquid and high-fiber foods increase the bulk of the stools and make them softer and easier to push along in the colon.

Medication against spasm can also help with the pain.

If you develop diverticulitis or infection in the diverticulae, you will need to take antibiotics and may even need hospitalization.

If these measures fail to control the symptoms or if one of the diverticulae ruptures, your doctor may recommend an operation to take out the part of the colon involved with the disease.

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Surgical Treatment

Prior to the surgery, the colon is cleaned thoroughly to decrease the chances of infection.

This is done using very strong laxatives and enemas or by the patient drinking a gallon of a special liquid the night before surgery to “flush out” the colon.

This surgery is done under general anesthesia with the patient asleep.

An incision is made in the middle of the abdomen going from top to bottom.

The abdomen is then entered.

The part of the colon involved with diverticulosis is taken out surgically.

Then the remaining colon is sutured back together. This procedure is known as ‘anastomosis.’

Sometimes the surgeon has to reroute the colon to the outside of the abdomen. This type of surgery is known as colostomy. This may be necessary if:

- The diverticulae have ruptured, spreading the infection to the abdomen.
- If you have an infection that could not be cured with antibiotics.
- If the colon is found not clean enough at the time of operation.

If you have a colostomy, then a bag then is placed over the opening of the colon to the outside to collect the stools. Bowel control is lost.

However, after 3 to 6 months, the colon can be put back together. This requires another operation. Bowel continuity and control will be re-established.

Risks and Complications

This surgery is very safe. There are, however, several possible risks and complications. These are unlikely but possible. You need to know about them just in case they happen. By being informed, you may be able to help your doctor detect complications early.

The risks and complications include those related to anesthesia and those related to any type of surgery.

Risks related to anesthesia include, but are not limited to, strokes, kidney failure, pneumonia, and blood clots in the legs.

These risks will be discussed with you in greater detail by your anesthesiologist.

Blood clots in the legs can occur. This usually shows up a few days after surgery. It causes the leg to swell and hurt a lot.

These blood clots can get dislodged from the legs and go to the lungs where they will cause shortness of breath, chest pain, and possibly even death. Sometimes the shortness of breath can happen without warning.

It is therefore extremely important to let your doctors know if any of these symptoms occur.

Getting out of bed shortly after surgery may help decrease the risk of this complication.

Some of the risks are seen in any type of surgery. These include:

- Infection, deep or at the skin level. Infections can involve the abdominal incision. Deep infections may involve the abdominal cavity itself. This is known as peritonitis. Treating deep infections may require long-term antibiotics and possibly surgery.
- Bleeding, either during or after the operation. This may require a blood transfusion or re-operation.
- The abdominal incision may break down requiring a second operation.

Other risks and complications are related specifically to this surgery. These again are very rare. However, it is important to know about them.

Structures in the abdomen could be damaged. Such problems can include the following:

- The spleen could be injured,
- The intestines, and stomach could be perforated,
- The kidneys, the urinary bladder, and the connecting tubes (ureter) could be injured.

- Internal female organs such as the uterus and ovaries could also be injured.
- The blood vessels going to the lower extremities could be affected.

Damage to these structures could lead to permanent damage and the need for other operations. These again are very rare. In extremely rare cases, death may result from these complications.

Hernias through the incision or incisions are possible. This happens when the internal wall of the abdomen is weak and intestines push under the skin. This may need another operation.

Another possible complication is the breakdown of the anastomosis, or the area where the two ends of the colon are attached. This can lead to infection in the abdomen requiring a re-operation and a colostomy.

Diverticulosis could happen again in another part of the colon. This is why you should change your diet and bowel habits to decrease that possibility.

After The Surgery

After the operation is done, the patient is transferred to the recovery room and then to a regular room.

You will not be allowed to eat or drink for few days to allow the anastomosis to heal.

A tube may be placed in the stomach through the nose for a few days. It sucks out the air and the juices of the stomach.

This is to prevent you from getting bloated and nauseated while giving the anastomosis time to heal.

You will then gradually be allowed to eat food.

You will go home in a few days, depending on how you are doing.

Make sure to contact your doctor in case of any new symptoms, such as fever, wound drainage, severe pain, weakness, swelling, or infection.

Summary

Diverticulosis is a common condition that may require surgery.

When surgery is recommended to treat diverticulosis, it is very successful in controlling the symptoms.

Colon surgery is very safe. Risks and complications are very rare. Knowing about them will help you detect and treat them early if they happen.